Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. **(Currently Amended)** A method for compressing and decompressing video image data of video image sequences ~~or the like~~, which are present as a sequence of ~~in each case in two-dimensionally addressable~~ respectively relevant ~~pixels of associated~~ pixel data[1] in pixels that can be addressed two-dimensionally, wherein in each case the pixel data of selected pixel quantities are analyzed with mathematical functions and are compressed reduced to their function parameters and after storage and/or transmission are decompressed with a corresponding mathematical function such that they are largely regenerated, ~~characterized in that~~comprising:

~~in~~ performing a basic analysis of the video data of a video image including

[[-]] determining contours of image structures are determined on the basis of non-sequential changes in brightness and/or color value in the case of pixels that are adjacent to one another,

[[-]] performing, through interpolation, a smoothing and closure of contours ~~is performed~~,

[[-]] describing the contours that are found in this way ~~are described~~ in segments in each case through a parameterized mathematical function and

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[1] ~~Translator's note: This literal translation of this sentence clause is based on a sentence clause with incoherent grammar in the German-language source document.~~

defining the contours ~~are defined~~ as objects, and assigning ~~wherein~~ all objects that contain a number of pixels below a predefinable threshold ~~are assigned~~ to a background,

[[-]] determining vectorially, for the individual objects and the background, a color dominance and color progression ~~is determined vectorially~~ in each case,

[[-]] determining vectorially the position and extent of the individual objects ~~are determined vectorially~~ in each case,

[[-]] determining, for the individual objects and the background, a structure function ~~is determined~~ in each case according to direction and size,

and ~~that~~ comprising, in the case of sequence analyses of video images, the steps of

[[-]] determining, in each case, the differential changes in brightness, size, position and orientation of the objects ~~are determined~~, taking into account the common contours of objects that abut one another,

[[-]] arranging and providing the objects and the background that are defined in this way, together with their optical, positional and structural data that are obtained in this way, ~~are arranged and provided~~ in a structured basic frame or sequence frame,

[[-]] transforming the basic frame data and sequence frame data that are provided accordingly ~~are transformed~~ into pixel data for decompression and image re-processing,

[[-]] determining, ~~in that~~ from the basic frame data from the objects, their

corresponding contour position data in the pixel image ~~are determined~~,

[[-]] filling up, for the background of the image and the objects, respectively delimited on the basis of the contour position data, the pixel representation ~~are [sic] filled up~~ with pixel data corresponding to the given associated structure function,

[[-]] reconstituting the pixel data corresponding to the given associated structure ~~which are reconstituted~~ in accordance with the color dominance value and the color progression vector as well as the brightness value, and

[[-]] applying the sequence frame data ~~are applied~~ in each case to the previous pixel representation for displacement and/or alteration.

2. **(Currently Amended)** A method according to claim 1, ~~characterized in that~~further comprising storing the objects described ~~are stored~~ with their mathematical functions in a neural network ~~(NN1)~~, which serves for ~~the~~ further recognition ~~(OE)~~ of objects in video image data ~~(VD)~~.

3. **(Currently Amended)** A method in accordance with ~~any of the above claims~~claim 1, ~~characterized in that~~ further comprising storing structure functions ~~(OS)~~ that have been determined ~~are stored~~ with their parameters of objects and backgrounds in a neural network ~~(NN2)~~, which serves as a starting basis in the further determination of structure functions ~~(OS)~~ with their parameters.

4. **(Currently Amended)** A method in accordance with ~~any of the above claims~~claim 1, ~~characterized in that~~wherein the structure function ~~(OS)~~ is represented in each case as a mathematical function and the parameters are whole-number values and the function provides an unlimited number of places after the decimal point.

5. **(Currently Amended)** A method in accordance with claim 4, ~~characterized in that~~ wherein the structure function ~~(OS)~~ is a fraction, an nth root or a transcendental function.

6. **(Currently Amended)** A method in accordance with ~~claim 4 or 5~~claim 4, ~~characterized in that~~ wherein the whole-number values are ~~represented,~~represented encrypted, as powers of prime numbers as well as sums or difference thereof.

7. **(Currently Amended)** A method in accordance with ~~any of claims 4 to 6~~claim 4, ~~characterized in that~~ wherein the parameters are represented as modulo 2 to the power of 8, and the structure functions are ~~function are [sic]~~ executed with quantities that are represented as modulo 2 to the power of 8, and provide such quantities as places after the decimal point.

8. **(Currently Amended)** A method in accordance with ~~any of the claims 4 to 7~~claim

4, ~~characterized in that~~ wherein the individual structure functions ~~(OS)~~ are determined in each case approximately matching to a pixel data sequence of an image line segment of predefined length or of a rectangular pixel image segment.

9. **(Currently Amended)** A method in accordance with claim 8, ~~characterized in that~~ wherein the line segment has a length of 64, 128 or 256 bytes or the pixel image segment has a size of 8 times 8 or 16 times 16 bytes.

10. **(Currently Amended)** A method in accordance with ~~one of the claims 8 or 9~~claim 8, ~~characterized in that~~ wherein the structure function ~~(OS) is adapted~~ is configured in each case as long or as precisely through successive approximation to the pixel data sequence that is to be approximately represented in each case, which is determined by a time specification ~~(TMax)~~ or an accuracy specification.

11. **(Currently Amended)** A method in accordance with claim 10, characterized in that the time specification or accuracy specification is determined depending on the position or a given speed of change of position of the given object, wherein for objects lying and/or resting centrally in the image, a longer time and/or a higher level of accuracy is assigned than for objects at the edge and/or objects that are in relatively fast motion and/or for the background.

12. **(Currently Amended)** A method in accordance with ~~any of the preceding claims~~claim 1, ~~characterized in that~~ wherein in each case only those objects are subjected to further identification and characterization that have a minimum number of pixels, and smaller objects are assigned to the background.

13. **(Currently Amended)** A method in accordance with claim 12, ~~characterized in that~~wherein the objects are processed one after another with a decreasing number of pixels as long as the available computing time allows, through which in the encryption of an image content, the minimum number of pixels of the objects is determined according to the available computing time.

14. **(New)** A method in accordance with claim 1, wherein the colour vector comprises a colour dominance vector and a colour progression vector.

15. (**New)** A method in accordance with claim 1, wherein with regard to the position of the objects, an extension is determined vectorially and in the sequence analysis an orientation of the same is determined vectorially.

16. (**New)** A method in accordance with claim 1, wherein the method is implemented on a computer by instructions stored on a computer readable medium and configured to implement the steps of the method.

17. (**New)** A method in accordance with claim 2, wherein the method is implemented on a computer by instructions stored on a computer readable medium and configured to implement the steps of the method.

18. (**New)** A method in accordance with claim 3, wherein the method is implemented on a computer by instructions stored on a computer readable medium and configured to implement the steps of the method.

19. (**New)** A method in accordance with claim 1, further comprising displaying the pixel data on a computer display.

20. (**New)** A method in accordance with claim 2, further comprising displaying the pixel data on a computer display.